

17.3.138 v.4
8-14-02

Jim -

Don't know if you
get a copy of this
or not.

Dave



LFC001959



August 14, 2002

Service Request No: K2205123

Dave Mendenhall
Longview Fibre Company
300 Fibre Way
P.O. Box 639
Longview, WA 98632

Re: Seattle Box

Dear Dave:

Enclosed are the results of the sample(s) submitted to our laboratory on July 30, 2002. For your reference, these analyses have been assigned our service request number K2205123.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace
Project Chemist

EW/jeb

Page 1 of 9

cc: Hank Rakoz, Longview Fibre, Longview, WA

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

00002

Inorganic Data Qualifiers

- The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

00003

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Longview Fibre Company
Project: Seattle Box Plant
Sample Matrix: Water

Service Request No.: K2205123
Date Received: 7/30/02

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier 1 data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services on 7/30/02. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Diesel Range Organics by NWTPH-Dx

Elevated Method Reporting Limits:

Sample West Parking Lot required dilution due to the presence of levels of Diesel Range Organics above the calibration range. The reporting limits are adjusted to reflect the dilution.

Surrogate Exceptions:

The control criteria were exceeded for the following surrogates in sample West Parking Lot due high levels of Diesel and Residual Range Organics which prevented adequate resolution for quantitation: o-Terphenyl and n-Triacontane. No further corrective action was appropriate.

Approved by _____

E. M. W.

Date

8/13/02

00004

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Seattle Box/Lv. Fibre
Sample Matrix: Water

Service Request: K2205123
Date Collected: 07/25/2002
Date Received: 07/30/2002

Diesel and Residual Range Organics

Sample Name: North Loading Dock
Lab Code: K2205123-001
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	2000	Y	250	1	08/01/02	08/02/02	KWG0205586	
Residual Range Organics (RRO)	960	L	500	1	08/01/02	08/02/02	KWG0205586	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	72	50-150	08/02/02	Acceptable
n-Triacontane	72	50-150	08/02/02	Acceptable

Comments:

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Form 1A - Organic

SuperSet Reference: RR18980

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LFC001964

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Seattle Box/Lv. Fibre
Sample Matrix: Water

Service Request: K2205123
Date Collected: 07/25/2002
Date Received: 07/30/2002

Diesel and Residual Range Organics

Sample Name: West Parking Lot
Lab Code: K2205123-002
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	66000	DY	2500	10	08/01/02	08/02/02	KWG0205586	
Residual Range Organics (RRO)	8600	F	500	1	08/01/02	08/02/02	KWG0205586	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	195	50-150	08/02/02	Outside Control Limits
n-Triacontane	5	50-150	08/02/02	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Seattle Box/Lv. Fibre
Sample Matrix: Water

Service Request: K2205123
Date Collected: NA
Date Received: NA

Diesel and Residual Range Organics

Sample Name: Method Blank
Lab Code: KWG0205586-5
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND U	250	1	08/01/02	08/02/02	KWG0205586	
Residual Range Organics (RRO)	ND U	500	1	08/01/02	08/02/02	KWG0205586	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	76	50-150	08/02/02	Acceptable
n-Triacontane	76	50-150	08/02/02	Acceptable

Comments: _____

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Form 1A - Organic

SuperSet Reference: RR18980

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LFC001966

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Angnew Libr Work Order K22 5123
Cooler received on 7/24/01 and opened on 7/24/01 by T. Black

1. Were custody seals on outside of cooler? Y ☒ N
If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y ☒ N
3. COC # Hand-delivery
Temperature of cooler(s) upon receipt: _____
Temperature Blank: _____
4. Were custody papers properly filled out (ink, signed, etc.)? Y ☒ N
5. Type of packing material present none
6. Did all bottles arrive in good condition (unbroken)? Y ☒ N
7. Were all bottle labels complete (i.e. analysis, preservation, etc.)? Y ☒ N
8. Did all bottle labels and tags agree with custody papers? Y ☒ N
9. Were the correct types of bottles used for the tests indicated? Y ☒ N
10. Were all of the preserved bottles received at the lab with the appropriate pH? Y ☒ N
11. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y ☒ N
12. Did the bottles originate from CAS/K or a branch laboratory? Y ☒ N
13. Are CWA Microbiology samples received with > 1/2 the 24 hr. hold time remaining from collection? Y ☒ N
14. Was CL2/Residual negative? Y ☒ N

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

00009

CRFREV.DOC12/24/01



May 21, 2002

Service Request No: K2203104

Jim Mantell
Longview Fibre Company
5901 E. Marginal Way
Seattle, WA 98124

Re: Longview Fibre (Seattle)

Dear Jim:

Enclosed are the results of the sample(s) submitted to our laboratory on May 14, 2002. For your reference, these analyses have been assigned our service request number K2203104.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace
Project Chemist

EW/jeb

Page 1 of 5

cc: Hank Rakoz and Dave Mendenhall at Longview Fibre, Longview, WA

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

00002

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

00003

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre (Seattle)
Sample Matrix: Water

Service Request: K2203104
Date Collected: 05/07/2002
Date Received: 05/14/2002

Diesel and Residual Range Organics

Sample Name: West Parking Lot
Lab Code: K2203104-001
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	35000 DY	2500	10	05/15/02	05/17/02	KWG0203344	
Residual Range Organics (RRO)	4300 O	500	1	05/15/02	05/16/02	KWG0203344	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	96	50-150	05/16/02	Acceptable
n-Triacontane	102	50-150	05/16/02	Acceptable

Comments: _____

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Form 1A - Organic

SuperSet Reference: RR16918

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Page 1 of 1

LFC001972

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre (Seattle)
Sample Matrix: Water

Service Request: K2203104
Date Collected: 05/07/2002
Date Received: 05/14/2002

Diesel and Residual Range Organics

Sample Name: North Loading Dock
Lab Code: K2203104-002
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	4500	Y	250	1	05/15/02	05/16/02	KWG0203344	
Residual Range Organics (RRO)	2000	O	500	1	05/15/02	05/16/02	KWG0203344	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	05/16/02	Acceptable
n-Triacontane	93	50-150	05/16/02	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre (Seattle)
Sample Matrix: Water

Service Request: K2203104
Date Collected: NA
Date Received: NA

Diesel and Residual Range Organics

Sample Name: Method Blank
Lab Code: KWG0203344-5
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND U	250	1	05/15/02	05/16/02	KWG0203344	
Residual Range Organics (RRO)	ND U	500	1	05/15/02	05/16/02	KWG0203344	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	79	50-150	05/16/02	Acceptable
n-Triacontane	94	50-150	05/16/02	Acceptable

Comments: _____

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Form 1A - Organic

SuperSet Reference: RR16918

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LFC001974

Hand
3104 Del

4. fibre

5-14-02

5.45

Office K-22

57

- no test on LOC

No tests on COC logged in GR
order form for analysis -

[illegible]

00008

LFC001976

300 Fibre Way
Longview, WA 98632
Phone: (360) 575-5570
Fax: (360) 575-6110

Longview Fibre Co

Fax

To: Jim Mantell

From: Dave Mendenhall

Fax: 206-767-2442

Date: May 6, 2002

Phone:

Pages: 2

Re: Sample you sent

CC:

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments: Jim- Sorry about the delay on the results from the sample of cake from the Beckart you sent back in February. We have been having problems with the instrument that we use to run these samples so couldn't do them until now. Anyway, here are the results.

Dave

Columbia Analytical Services -- Kelso
INTERNAL LOGIN SUMMARY REPORT (1101)
17-MAY-02 14:21

Service Req. No. K2203104 Project No. 125855
Client No. 125855 Project Name Longview Fibre (Seattle)
Client Name Longview Fibre Company
Bill To: Longview Fibre-Seattle Box Plant Report To: Longview Fibre Company
Attn: Accounts Payable Jim Mantell
5901 E. Marginal Way S.
Seattle, WA 98124 5901 E. Marginal Way S.
Seattle, WA 98124
P.O. No. LV040784 L Site ID
Logged In By KNORROW Project Chemist Ed Wallace
ISR Num
COC Received Y
Samples Submitted 14-MAY-02

Bottles: 2 - 500 ml Amber

Storage: HERK C2

CAS Samp No.	Client Sample No.	Matrix	Collected	DueDate	DX-NWFPH
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K2203104-001	West Parking Lot	WATER	17:30 07-MAY-02	28-MAY-02	1
K2203104-002	North Loading Dock	WATER	17:10 07-MAY-02	28-MAY-02	1

Comments:

125855

cc: Hank Rakoz.

Samples Found To Be Hazardous: NONE__ ALL__ *SOME__

Reviewed By: _____

ACKNOWLEDGMENT OF RECEIPT OF SAMPLES

TO:

Jim Mantell
Longview Fibre Company
5901 E. Marginal Way S.
Seattle, WA 98124

FROM:

Ed Wallace, Project Chemist
Columbia Analytical Services, Inc.

This is to inform you that the samples received for testing have been assigned CAS Service Request number K2203104. Please verify information and notify me of any corrections.

A copy of our work order is attached. If you have any questions regarding the status of this work, please call me at (360) 577-7222.

Thank you for your business.

Number of pages - 2 - (including cover sheet).

Columbia Analytical Services, Inc.
1317 South 13th Avenue
P.O. Box 479
Kelso, WA 98626
(360) 577-7222
(360) 636-1068 - FAX

* During the next few months, you may notice format changes in some of the documents you receive from CAS. However, these documents should contain the same information you are accustomed to receiving.



January 9, 2002

Service Request No: K2109499

Sonny Bivins
Longview Fibre Company
5901 E. Marginal Way
Seattle, WA 98124

Re: Longview Fibre Seattle

Dear Sonny:

Enclosed are the results of the sample(s) submitted to our laboratory on December 21, 2001. For your reference, these analyses have been assigned our service request number K2109499.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace

Ed Wallace
Project Chemist

EW/ll

Page 1 of 2

cc: Hank Rakoz, Longview Fibre (Longview)
Dave Mendenhall, Longview Fibre (Longview)

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

00002

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
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- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
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- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

00903

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre Seattle
Sample Matrix: Water

Service Request: K2109499
Date Collected: 12/17/2001
Date Received: 12/21/2001

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: North Loading Dock
Lab Code: K2109499-001
Extraction Method: EPA 3510C
Analysis Method: FIQ

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	99	1	12/22/01	12/27/01	KWG0108657	
Diesel Range Organics (DRO)	2100	Y	99	1	12/22/01	12/27/01	KWG0108657	
Residual Range Organics (RRO)	3000	O	250	1	12/22/01	12/27/01	KWG0108657	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	60	35-150	12/27/01	Acceptable
o-Terphenyl	86	50-150	12/27/01	Acceptable
n-Triacontane	94	50-150	12/27/01	Acceptable

Comments: _____

Printed: 01/02/2002 14:18:30
Merged

Form 1A - Organic

00004
Page 1
SuperSet Reference: RR13911

LFC001983

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre Seattle
Sample Matrix: Water

Service Request: K2109499
Date Collected: 12/17/2001
Date Received: 12/21/2001

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: West Parking Lot
Lab Code: K2109499-002
Extraction Method: EPA 3510C
Analysis Method: FIQ

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	14000 H	99	1	12/22/01	12/27/01	KWG0108657	
Diesel Range Organics (DRO)	92000 DY	990	10	12/22/01	01/02/02	KWG0108657	
Residual Range Organics (RRO)	8900 O	250	1	12/22/01	12/27/01	KWG0108657	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	119	35-150	12/27/01	Acceptable
o-Terphenyl	105	50-150	12/27/01	Acceptable
n-Triacontane	105	50-150	12/27/01	Acceptable

Comments: _____

Printed 01/02/2002 14:18:34
Merged

Form 1A - Organic

SuperSet Reference: RR13911

00005

Page 1 of 1

LFC001984

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre Seattle
Sample Matrix: Water

Service Request: K2109499
Date Collected: NA
Date Received: NA

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Method Blank
Lab Code: KWG0108657-5
Extraction Method: EPA 3510C
Analysis Method: FIQ

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND U	100	1	12/22/01	12/26/01	KWG0108657	
Diesel Range Organics (DRO)	ND U	100	1	12/22/01	12/26/01	KWG0108657	
Residual Range Organics (RRO)	ND U	250	1	12/22/01	12/26/01	KWG0108657	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	73	35-150	12/26/01	Acceptable
o-Terphenyl	77	50-150	12/26/01	Acceptable
n-Triacontane	94	50-150	12/26/01	Acceptable

Comments: _____

00006

Printed 01/02/2002 14:18:37
Merged

Form 1A - Organic

Page 1 of 1
SuperSet Reference: RR13911

LFC001985

Project/Client 11312E Work Order K21 9499
Cooler received on 12/21/01 and opened on 12/21/01 by AP

- Explain any discrepancies: NO ANALYSIS LISTED ON COC - BOTTLES ARE
MAKED FOR DX-NUTPH

RESOLUTION:

[illegible]

~~44-1768~~



October 22, 2001

Service Request No: K2107247

Sonny Bivins
Longview Fibre Company
5901 E. Marginal Way
Seattle, WA 98124

Re: Longview Fibre Seattle

Dear Sonny:

Enclosed are the results of the sample(s) submitted to our laboratory on October 2, 2001. For your reference, these analyses have been assigned our service request number K2107247.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace

Ed Wallace
Project Chemist

EW/afs

Page 1 of 8

cc: Hank Rakoz, Longview Fibre
Dave Mendenhall, Longview Fibre

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

00002

Inorganic Data Qualifiers

- The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

00003

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre Seattle
Sample Matrix: Water

Service Request: K2107247
Date Collected: 09/28/2001
Date Received: 10/02/2001

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: West Parking Lot
Lab Code: K2107247-001
Extraction Method: EPA 3510C
Analysis Method: FIQ

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	56000	DH	10000	100	10/05/01	10/12/01	KWG0106552	
Diesel Range Organics (DRO)	280000	DF	10000	100	10/05/01	10/12/01	KWG0106552	
Residual Range Organics (RRO)	26000	DO	25000	100	10/05/01	10/12/01	KWG0106552	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	199	35-150	10/12/01	Outside Control Limits
o-Terphenyl	0	50-150	10/12/01	Outside Control Limits
n-Triacontane	59	50-150	10/12/01	Acceptable

Comments: _____

00004

Printed: 10/17/2001 10:42:08
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Form 1A - Organic

Page 1 of 1
SuperSet Reference: RR12016

LFC001991

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre Seattle
Sample Matrix: Water

Service Request: K2107247
Date Collected: 09/28/2001
Date Received: 10/02/2001

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: North Shipping Deck
Lab Code: K2107247-002
Extraction Method: EPA 3510C
Analysis Method: FIQ

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	200 H	100	1	10/05/01	10/06/01	KWG0106552	
Diesel Range Organics (DRO)	3100 Y	100	1	10/05/01	10/06/01	KWG0106552	
Residual Range Organics (RRO)	2000 F	250	1	10/05/01	10/06/01	KWG0106552	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	61	35-150	10/06/01	Acceptable
o-Terphenyl	78	50-150	10/06/01	Acceptable
n-Triacontane	73	50-150	10/06/01	Acceptable

Comments:

00005

Printed: 10/17/2001 10:42:08
Merged

Form 1A - Organic

Page 1 of 1
SuperSet Reference: RR12016

LFC001992

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Longview Fibre Seattle
Sample Matrix: Water

Service Request: K2107247
Date Collected: NA
Date Received: NA

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Method Blank
Lab Code: KWG0106552-6
Extraction Method: EPA 3510C
Analysis Method: FIQ

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	10/05/01	10/06/01	KWG0106552	
Diesel Range Organics (DRO)	ND	U	100	1	10/05/01	10/06/01	KWG0106552	
Residual Range Organics (RRO)	ND	U	250	1	10/05/01	10/06/01	KWG0106552	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	62	35-150	10/06/01	Acceptable
o-Terphenyl	83	50-150	10/06/01	Acceptable
n-Triacontane	75	50-150	10/06/01	Acceptable

Comments: _____

00006

Printed: 10/17/2001 10:42:09
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Form 1A - Organic

Page 1 of 1
SuperSet Reference: RR12016

LFC001993

LFC001994

Hand sel

Q 7247

- YES NO
YES NO
—
—
YES NO
YES NO
YES NO
YES NO
~~YES NO~~
~~YES NO~~
YES NO
discrepancies

any

[illegible]

CRFREV.DOC9/28/01

LFC001995

Columbia Analytical Services -- Kelso
INTERNAL LOG IN SUMMARY REPORT (i101)
24-FEB-00 08:37

Service Req. No. K2001203
Client No. 125855
Client Name Longview Fibre Company

Bill To: Longview Fibre-Seattle Box Plant
Attn: Accounts Payable
5901 E. Marginal Way S.
Seattle, WA 98124

P.O. No. LVD39801 L
Logged In By FADARR
ISR Num
COC Received N
Samples Submitted 22-FEB-00

Project No.
Project Name Quarterly Groundwater

Report To: Longview Fibre Company
Jim Mantell
5901 E. Marginal Way S.
Seattle, WA 98124

Site ID
Project Chemist Ed Wallace

Bottles: 2 - 1 L Amber

Storage: HERX E3

CAS Samp No.	Client Sample No.	Matrix	Collected DueDate	DX-NMTPH
--------------	-------------------	--------	-------------------	----------

K2001203-001	#1 North Loading Dock	H2O	17-FEB-00 07-MAR-00	1
K2001203-002	#2 West Parking Lot	H2O	17-FEB-00 07-MAR-00	1

Comments:

K2001203 DX-NMTPH: * WATCH HOLD TIME.
125855 cc: Dave Mendenhall

Samples Found To Be Hazardous: NONE__ ALL__ *SOME__

Reviewed By: _____



June 15, 2001

Service Request No: K2103785

Jim Mantell
Longview Fibre Company
5901 E. Marginal Way
Seattle, WA 98124

Re: Longview Fibre (Seattle Box)

Dear Jim:

Enclosed are the results of the sample(s) submitted to our laboratory on May 31, 2001. For your reference, these analyses have been assigned our service request number K2103785.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace

Ed Wallace
Project Chemist

EW/

Page 1 of 9

cc: Hank Rakoz, Longview Fibre Company
Dave Mendenhall, Longview Fibre Company

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

00002

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

00003

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Longview Fibre Company
Project: Longview Fibre (Seattle Box)
Sample Matrix: Water

Service Request: K2103785
Date Collected: 5/29/01
Date Received: 5/31/01

Semivolatile Petroleum Products
Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: North Shipping dock
Lab Code: K2103785-001
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Gasoline	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Naphtha Distillate	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Jet Fuel as JP-4	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Mineral Spirits	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Jet Fuel as Jet A	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Kerosene	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Diesel	EPA 3510C	8015B	100	1	6/1/01	6/5/01	1900	H
Heavy Fuel Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	ND	
Lube Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	930	O

*

Semi-quantitative. Results are expected to exhibit a low bias due to a potential loss of the volatile components during the extraction procedure.

Approved By: _____

Date: _____

1522/020597p

03785PHC LL1 - 1 6/11/01

Page No.

00004

LFC002000

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Longview Fibre Company
Project: Longview Fibre (Seattle Box)
Sample Matrix: Water

Service Request: K2103785
Date Collected: 5/29/01
Date Received: 5/31/01

Semivolatile Petroleum Products
Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: West Parking Lot
Lab Code: K2103785-002
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Gasoline	EPA 3510C	8015B	100	1	6/1/01	6/5/01	6700	*H
Naphtha Distillate	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Jet Fuel as JP-4	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Mineral Spirits	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Jet Fuel as Jet A	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Kerosene	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Diesel	EPA 3510C	8015B	100	1	6/1/01	6/7/01	39000	F
Heavy Fuel Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	ND	
Lube Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	4200	F

* Semi-quantitative. Results are expected to exhibit a low bias due to a potential loss of the volatile components during the extraction procedure.

Approved By: _____

Date: 6/15/01

1522/020397p

03785PHC.LL1 - 2 6/11/01

Page No.

50005

LFC002001

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Longview Fibre Company
Project: Longview Fibre (Seattle Box)
Sample Matrix: Water

Service Request: K2103785
Date Collected: NA
Date Received: NA

Semivolatile Petroleum Products
Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Method Blank
Lab Code: K010501-WB
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Gasoline	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Naphtha Distillate	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Jet Fuel as JP-4	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Mineral Spirits	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Jet Fuel as Jet A	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Kerosene	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Diesel	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Heavy Fuel Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	ND	
Lube Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	ND	

*

Semi-quantitative. Results are expected to exhibit a low bias due to a potential loss of the volatile components during the extraction procedure.

Approved By: _____

Date: _____

6/15/01

1522020397p

03785PHC LL1 - MB 6/11/01

Page No.

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LFC002002

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Longview Fibre Company
Project: Longview Fibre (Seattle Box)
Sample Matrix: Water

Service Request: K2103785
Date Collected: 5/29/01
Date Received: 5/31/01
Date Extracted: 6/1/01
Date Analyzed: 6/5/01

Surrogate Recovery Summary Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Prep Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Basis: NA

Sample Name	Lab Code	Test Notes	P e r c e n t R e c o v e r y		
			o-Terphenyl	4-Bromofluorobenzene	n-Triacontane
North Shipping dock	K2103785-001		82	55	86
West Parking Lot	K2103785-002		70	71	84
Method Blank	K010601-WB		90	58	86

CAS Acceptance Limits: 50-150 20-150 50-150

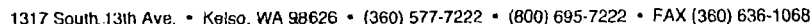
Approved By: _____

Date: _____

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Page No

LFC002003



SR#:

COC #

PAGE 1 OF 1

RCOC #1 04/01

LFC002004

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Hand Del

Project/Client LV. Fibre Work Order K21 3785
Cooler received on 13/31/01 and opened on 5/31/01 by RM

1. Were custody seals on outside of cooler?
If yes, how many and where? YES ☒ NO ☐
2. Were seals intact and signature & date correct? YES ☒ NO ☐
3. COC # _____
Temperature of cooler(s) upon receipt: 11.9 _____
Temperature Blank: _____
4. Were custody papers properly filled out (ink, signed, etc.)? YES ☒ NO ☐
5. Type of packing material present Bubbles
6. Did all bottles arrive in good condition (unbroken)? YES ☒ NO ☐
7. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES ☒ NO ☐
8. Did all bottle labels and tags agree with custody papers? YES ☒ NO ☐
9. Were the correct types of bottles used for the tests indicated? YES ☒ NO ☐
10. Were all of the preserved bottles received at the lab with the appropriate pH? YES ☒ NO ☐
11. Were VOA vials checked for absence of air bubbles, and if present, noted below? YES ☒ NO ☐
12. Did the bottles originate from CAS/K or a branch laboratory? YES ☒ NO ☐

Explain any discrepancies _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
<u>Samples rec out of temp.</u>				<u>Am</u>	<u>yes</u>	<u>RM</u>

00000

June 3, 2003

Service Request No: K2303331

Jim Mantell
Longview Fibre Company
5901 E. Marginal Way S.
Seattle, WA 98124

RE: Seattle Ground Water

Dear Jim:

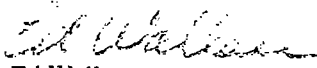
Enclosed are the results of the sample(s) submitted to our laboratory on May 5, 2003. For your reference, these analyses have been assigned our service request number K2303331.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.


Ed Wallace
Project Chemist

EW/jeb

Page 1 of 8

cc: Hank Rakoz, Longview Fibre

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

00002

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

00003

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Seattle Ground Water
Sample Matrix: Water

Service Request: K2303331
Date Collected: 05/01/2003
Date Received: 05/05/2003

Diesel and Residual Range Organics

Sample Name: West Parking Lot
Lab Code: K2303331-001
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	140000	DY	25000	100	05/07/03	05/28/03	KWG0306416	
Residual Range Organics (RRO)	13000	DO	5000	10	05/07/03	05/12/03	KWG0306416	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	132	50-150	05/12/03	Acceptable
n-Triacontane	109	50-150	05/12/03	Acceptable

Comments: _____

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Form 1A - Organic

SuperSet Reference: RR27050

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LFC002009

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Seattle Ground Water
Sample Matrix: Water

Service Request: K2303331
Date Collected: 05/01/2003
Date Received: 05/05/2003

Diesel and Residual Range Organics

Sample Name: North Loading Dock
Lab Code: K2303331-002
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	8600	Y	260	1	05/07/03	05/12/03	KWG0306416	
Residual Range Organics (RRO)	3300	O	520	1	05/07/03	05/12/03	KWG0306416	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	87	50-150	05/12/03	Acceptable
n-Tricontane	97	50-150	05/12/03	Acceptable

Comments:

Printed: 05/30/2003 09:44:32
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Merged

Form 1A - Organic

SuperSet Reference: RR27050

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LFC002010

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Longview Fibre Company
Project: Seattle Ground Water
Sample Matrix: Water

Service Request: K2303331
Date Collected: NA
Date Received: NA

Diesel and Residual Range Organics

Sample Name: Method Blank
Lab Code: KWG0306416-6
Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND U	250	1	05/07/03	05/07/03	KWG0306416	
Residual Range Organics (RRO)	ND U	500	1	05/07/03	05/07/03	KWG0306416	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Tolphenyl	105	50-150	05/07/03	Acceptable
n-Tricontane	102	50-150	05/07/03	Acceptable

Comments:

Printed: 05/30/2003 09:45:03
User: nCrystal rptForm1m rpt

Merged

Form 1A - Organic

SuperSet Reference: RR27050

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LFC002011

142303431

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

PAGE OF COC #

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RCOC #1 04/02

LFC002012

Columbia Analytical Services, Inc. General Terms and Conditions

Laboratory Services • 1-800-695-7222

1. These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory ("LAB") and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to LAB. The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state from which services are procured.

2. **Warranty.** Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

At LAB's sole discretion, preliminary results may be given in advance of the laboratory report. Such preliminary results are tentative, subject to confirmation and final review by LAB. Client's use of preliminary results in any manner shall be at Client's sole risk.

3. **Scope and Compensation.** LAB agrees to perform the services described in the proposal or agreement to which these Terms and Conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1 1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sales, use or other taxes. Such taxes will be added to invoice prices when required. LAB reserves the right to require payment prior to release of data. Until such time as Client invoices are paid in full, LAB has no obligation, and will not defend, reproduce, return, or supplement data results.

4. **Prices.** Compensation for services performed will be based on the current Lab Analytical Fee Schedule, or on verbal quotations agreed to in writing by the parties. Unless specifically indicated on the written confirmation of quotation, analytical turnaround times are not guaranteed. The minimum charge will be \$100.00 unless otherwise noted.

5. **Methods.** Where applicable, LAB will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), State Agency, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemists (AOAC), Standard Methods for the Examination of Water and Wastewater, or other recognized methodologies. LAB reserves the right to deviate from these methodologies, if necessary or appropriate, due to the nature or composition of the sample or otherwise, based on the reasonable judgment of LAB. Deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or LAB's standard operating procedures.

6. **Limitations of Liability.** In the event of any error, omission or other professional negligence, the sole and exclusive responsibility of LAB shall be to reperform the deficient work at its own expense, and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation or responsibility of any kind for losses, costs, expenses or other damages (including but not limited to any special, indirect, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients, and LAB is in no way responsible for the use of such results by clients or third parties. All results should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of the results.

7. **Hazard Disclosure.** Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance which is to be delivered to LAB will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

8. **Sample Handling.** Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss of or damage to such sample remains

with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from LAB's premises.

LAB will use its best efforts to arrange for the shipment of specially prepared sample bottles, sampling instructions per Client instruction by the readily available, least cost method. Any other shipment arrangements will be at Client's expense.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis, unless modified by applicable state or federal laws. Client will be required to give to LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample which, in the sole judgment of LAB, (a) is of unsuitable volume, (b) may be or become unsuitable for, or may pose a risk in handling, transport or processing for any health, safety, environmental or other reason, whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) has been delivered to the LAB more than 72 hours after sampling or if one half or more of the recommended holding time for the analysis has lapsed.

9. **Legal Responsibility.** LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort, including negligence.

10. **Data Deliverables.** Where specifically requested by Client, LAB agrees to produce electronic data representing services performed hereunder, subject to the following specific understanding between the parties: LAB agrees to supply Client with electronic data as mutually defined, using an agreed medium. Client recognizes that LAB is not a software consultant, manufacturer or reseller; any transfer of electronic data pursuant to services provided by LAB is an accommodation to and strictly for the convenience of the client who is solely liable for the choice and maintenance of the medium utilized. Electronic data provided under this agreement is not deemed to be the project deliverable for the purpose of fulfilling obligations under the Agreement. The provision of electronic data does not in any way modify the intention of the parties that the Client rely on the written or hard copy form of the deliverable.

Except with regard to any limited warranty as specifically set forth below, LAB disclaims and excludes all warranties express or implied with regard to the creation, transmittal or use of electronic data hereunder. The limited warranty in this Agreement replaces all other warranties, express or implied, including any warranties of merchantability or fitness for a particular purpose. Professional warranties extend to written or hard copy deliverables only and do not extend to electronic data supplied to Client. Professional warranties in the Agreement which extend to written or hard copy deliverables shall be undisturbed by this Amendment. LAB's liability for medium failure shall be limited to replacement of the electronic data with a hard copy for a period of thirty days from the date of delivery. LAB's electronic data transfer is derived in part from or is created using third party software, and no such third party warrants or assumes any liability regarding use of or undertakes to provide support information relating to LAB's electronic data. LAB will utilize anti-virus programs on a best efforts basis in preparation of the electronic data transfer, but LAB makes no warranty as to the effectiveness of such screening. LAB will also use its best efforts to ensure that its electronic data will meet all criteria as specified by Client, including criteria regarding date/time data, if, and when, included; but LAB makes no warranty as to the appropriateness of the client specified criteria by accepting the same.

In addition to indemnities contained in the underlying agreement between LAB and Client, Client shall hold LAB harmless from any claims, suits or liability arising from or related to electronic data supplied pursuant to this Agreement. Any reuse of original or altered files by Client shall be at Client's risk and without liability or responsibility to LAB, but shall entitle LAB to additional compensation for such unauthorized reuse. In no event will LAB's liability for electronic data include any special, incidental or consequential damages, whether or not LAB has knowledge of the potential for loss or damage.

11. **Force Majeure.** LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

**Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form**

Project/Client Lv. Fibre Work Order K23 3331
Cooler received on 5/5/03 and opened on 5/5/03 by Rhe


1. Were custody seals on outside of cooler?
If yes, how many and where? Y N
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: WPS Y N
4. COC # _____
Temperature of cooler(s) upon receipt: 13.9 _____
Temperature Blank: _____
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Sleeves
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (i.e. analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > 1/2 the 24 hr. hold time remaining from collection? Y N
15. Was CI2/Res negative? Y N

Explain any discrepancies: Used Bottle order for login - Tests are
Missing on COC

***RESOLUTION:**

Samples that required preservation or received out of temperature:

Samples rec'd out of temp

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
						

CRFREV.DOC3/5/2003

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LFC002014